AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A method comprising:

electing a first server <u>from a plurality of servers to serve</u> as active manager server to manage services for the plurality of servers residing in a chassis, the election of the first server is based on a predetermined criteria ~~wherein the first server resides in a chassis and the active manager to run services for each server in the chassis~~;

continuously ~~storing replicated~~ <u>communicating</u> health metrics and performance metrics ~~from~~ <u>relating to</u> each server <u>with other servers of the plurality of servers</u> in the chassis to avoid reconfiguring the ~~active manager server~~ <u>plurality of servers</u> when replacing a failed server with a new server, <u>and to avoid interrupting the first server from serving as the active manager server</u>;

<u>predicting a server failure based on predetermined thresholds, the predetermined thresholds are tested based on current status of the health metrics and the performance metrics relating to the plurality of servers;</u>

receiving an indication ~~that the first server has failed~~ <u>of the failed server,</u> ~~wherein the indication is based on the health metrics and performance metrics~~;

<u>determining whether the failed server includes the first server;</u>

~~based on receiving the indication,~~ electing a second server to replace the ~~first~~ <u>failed</u> server to ~~act~~ <u>serve</u> as the active manager server based on ~~a~~ <u>the</u> predetermined criteria, <u>if the failed server includes the first server</u> ~~wherein the second server resides in the chassis~~;

automatically replacing the first server with the second server ~~as the active manager server in response to the indication received~~ to serve as the active manager server to provide an interrupted management of the services for the plurality of servers in the chassis; and

~~redirecting requests for the first server to~~ continuously communicating the health metrics and the performance metrics of each server, including the second server, between the plurality of servers in the chassis.

2.   (Previously Presented) The method of claim 1, wherein the predetermined criteria comprises electing a server with the lowest internet protocol (IP) address as the active manager server.

3.   (Previously Presented) The method of claim 1, further comprising:

extracting the health metrics and performance metrics, wherein the health metrics and performance metrics comprise dynamic health metrics and performance metrics;

replicating the health metrics and performance metrics, wherein the replicating the health metrics and performance metrics is performed periodically; and

dynamically updating a database populated with the health metrics and performance metrics.

4.   (Previously Presented) The method of claim 3, wherein the health metrics comprise server-based health metrics and performance metrics.

5.   (Currently Amended) The method of claim 3, wherein the health metrics comprise one or more of tracking power levels and temperature levels ~~based on predetermined thresholds~~.

6.   (Previously Presented) The method of claim 3, wherein the performance metrics

comprise one or more of operating system-based metrics, kernel-based metrics,

and server-based metrics.

7.   (Previously Presented) The method of claim 3, wherein the performance metrics

comprise one ore more of tracking central processing unit (CPU) utilization and

memory utilization ~~based on predetermined thresholds~~.

8.   (Previously Presented) The method of claim 3, further comprises alerting

whenever the health metrics or the performance metrics violate the predetermined

thresholds.

9.   (Previously Presented) The method of claim 3, further comprising replicating

identification information, wherein the identification information comprises static

identification information.

10.   (Currently Amended) A high-availability management system comprising:

a chassis comprising a plurality of servers, the chassis coupled to a system

        management server and a database; and

~~a chassis comprising a plurality of slots;~~

the management server to

~~a plurality of server modules coupled to the plurality of slots, wherein~~ elect a first

        server ~~module~~ of the plurality of ~~server modules~~ servers to serve as ~~is~~

        ~~elected as an~~ active manager server, the active manager server to manage

        services for the plurality of servers residing in the chassis, the election of

        the first server is based on a predetermined criteria ~~run services for each of~~

        ~~the plurality of server modules~~;

a database coupled to the plurality of server modules to ~~store~~ continuously

~~replicated~~ communicate health metrics and performance ~~metrics from~~

relating to each server of the plurality of servers in the chassis with other

servers of the plurality of servers to avoid reconfiguring the ~~active~~

~~manager server~~ plurality of servers when replacing a failed server with a

new server, and to avoid interrupting the first server from serving as the

active manager server;

predict a server failure based on predetermined thresholds, the predetermined

thresholds are tested based on current status of the health metrics and the

performance metrics relating to the plurality of servers;

~~a second server module elected, based on receiving~~ receive the indication of the

failed server~~, to replace the first server to act as the active manager server~~

~~based on a predetermined criteria~~;

determine whether the failed server includes the first server;

~~an indication to indicate that the first server module has failed, wherein the~~

~~indication is based on health metrics and performance metrics;~~

elect a second server to replace the failed server to serve as the active manager

server based on the predetermined criteria, if the failed server includes the

first server~~the second server module to automatically replace the first~~

~~server module as the active manager server in response to the indication~~

~~received; and~~

automatically replacing the first server with the second server to serve as the

active manager server to provide an interrupted management of the

services for the plurality of servers in the chassis; and

a redirection process to redirect requests for the first server module to continuously communicating the health metrics and the performance metrics of each server, including the second server module, between the plurality of servers in the chassis.

11.   (Currently Amended) The high-availability management system of claim 10, further comprising a wherein the database coupled to the chassis for storing is to store the health metrics and the performance metrics, the database is further to store information regarding one or more of chassis identification, slot identification, and server module type.

12-13. (Cancelled)

14.   (Currently Amended) The high-availability management system of claim 10, wherein the election of the first server module as the active manager server is performed by middleware, wherein the middleware comprises a via one or more of software and hardware.

15.   (Currently Amended) The high-availability management system of claim 10, wherein the election of the second server module as the active manager server is performed by the middleware via one or more of software and hardware.

16.   (Currently Amended) The high-availability management system of claim 10, wherein the first server module is elected from a group comprising plurality of servers comprise one or more of computer servers, telephone line cards, and power substations stations.

17-20. (Cancelled)

21.   (Currently Amended) A machine-readable medium ~~having stored thereon data representing sets of~~ comprising instructions~~, the sets of instructions~~ which, when executed ~~by a machine~~, cause ~~the~~ a machine to:

elect a first server from a plurality of servers to serve as active manager server to manage services for the plurality of servers residing in a chassis, the election of the first server is based on a predetermined criteria~~, wherein the first server resides in a chassis and the active manager to run services for each server in the chassis~~;

continuously ~~store replicated~~ communicate health metrics and performance metrics ~~from~~ relating to each server with other servers of the plurality of servers in the chassis to avoid reconfiguring the ~~active manager server~~ plurality of servers when replacing a failed server with a new server, and to avoid interrupting the first server from serving as the active manager server;

predict a server failure based on predetermined thresholds, the predetermined thresholds are tested based on current status of the health metrics and the performance metrics relating to the plurality of servers;

receive an indication of the failed server ~~that the first server has failed, wherein the indication is based on the health metrics and performance metrics~~;

determine whether the failed server includes the first server;

elect a second server to replace the failed server to serve as the active manager server based on the predetermined criteria, if the failed server includes the first server ~~based on receiving the indication, elect a second server to~~

~~replace the first server to act as the active manager server based on a~~

~~predetermined criteria, wherein the second server resides in the chassis;~~

automatically replace the first server with the second server <u>to serve as the active</u>

<u>manager server to provide an interrupted management of the services for</u>

<u>the plurality of servers in the chassis</u>~~as the active manager server in~~

~~response to the indication received~~; and

~~redirect requests for the first server to~~<u>continuously communicating the health</u>

<u>metrics and the performance metrics of each server, including</u> the second

server, <u>between the plurality of servers in the chassis.</u>

22.　(Previously Presented) The machine-readable of claim 21, wherein the

predetermined criteria comprises electing a server with the lowest internet

protocol (IP) address as the active manager server.

23.　(Currently Amended) A machine-readable medium of claim 21, wherein the ~~sets~~

~~of~~instructions ~~which,~~<u>which</u> when executed ~~by the machine~~, further cause the

machine to:

extract the health metrics and performance metrics, wherein the health metrics

and performance metrics comprise dynamic health metrics and

performance metrics;

replicate the health metrics and performance metrics, wherein the replicating the

health metrics and performance metrics is performed periodically; and

dynamically update a database populated with the health metrics and performance

metrics.

24-26.　(Cancelled)